Mr. Richard H. Doyle Regional Administrator Region I Federal Transit Administration Volpe Center 55 Broadway, Suite 920 Cambridge, MA 02142-1093

Dear Mr. Doyle:

Subject: State Project No. 171-305

New Britain - Hartford Busway

New Britain, Newington, West Hartford and Hartford

Reevaluation of the Final Environmental Impact Statement (FEIS)

This environmental reevaluation is submitted in accordance with the Federal Transit Administration (FTA) regulations (23 CFR part 771.129 (a)). The subject regulations require the Connecticut Department of Transportation (ConnDOT) to consult with FTA to establish whether the approved National Environmental Policy Act (NEPA) document remains valid and to request FTA action on any major approvals or grants.

Background

The New Britain-Hartford Busway facility will be a dedicated Bus Rapid Transit (BRT) facility along a 9.4-mile corridor between downtown New Britain and downtown Hartford, along with associated improvements to make the Busway successful. The recommended corridor for the Busway follows an abandoned railroad right-of-way from New Britain to approximately 2000 feet south of Newington Junction. From this point north, the Busway corridor lies within the active Amtrak railroad right-of-way and is, for the most part, parallel to the active Amtrak rail line. A total of up to twelve transit stations would serve the users of the Busway. Buses using this corridor would have more competitive travel times when compared with automobiles, since buses would bypass congestion on arterial streets and I-84. The facility would permit bus access at intermediate points and at the New Britain and Hartford downtown terminals, allowing buses to enter and leave the Busway to circulate in surrounding neighborhoods and the downtown business districts thus providing a one-seat ride. Busway services will include express, shuttle, circulator, and connecting feeder bus services. A multi-use trail will be constructed adjacent to

the Busway in the areas where it can be accommodated.

The BRT project was the recommendation of the Hartford West Major Investment Study (MIS) which began in 1996 and was completed in 1999. The MIS recommended a hybrid package of improvements, including the New Britain – Hartford Busway as its principal action.

The EIS process began in late 1999. The purpose of the Draft EIS was to assess the anticipated environmental impacts of the project, as required under the National Environmental Policy Act and the Connecticut Environmental Policy Act (CEPA). As the Draft EIS process progressed, public input was solicited at numerous meetings. A variety of alignment and station options were considered. Three alignment options and twenty-one station options (at twelve locations) were ultimately included in the Draft EIS.

The Draft EIS for the New Britain – Hartford Busway was released for public circulation on March 20, 2001. The Final EIS notice of availability was published in the Federal Register on December 21, 2001. The Record of Decision (ROD) was approved on March 13, 2002.

On April 18, 2006, ConnDOT submitted a list of refinements to the project design along with a reevaluation of those items compared to the FEIS and the commitments from the ROD. This submittal was reviewed by FTA and adopted on June 2, 2006.

On October 26, 2006 ConnDOT was approved to begin final design of the project. As design progressed, some additional design changes emerged and the cost of the project rose as cost estimates were refined in 2007. ConnDOT's reassessment of the project cost in order to mitigate the cost increase resulted in some additional proposed design changes. This current submission contains a reevaluation of a set of these project refinements to determine whether any additional environmental review work is required.

ADDITIONAL DESIGN CHANGES

ConnDOT has evaluated the sixty-five commitments outlined in the approved ROD and in the April 2006 Reevaluation and do not anticipate that any of the commitments were altered due to the following design changes:

1. Downtown New Britain Station

<u>April 2006 Reevaluation Scope</u>

The reevaluation document submitted in 2006 proposed a re-design of the station to include reconstruction of the existing off-ramp from Route 72 eastbound to Route 71 (the Truman Overpass), the reconstruction of the existing on-ramp from Route 71 to Route 9 southbound, the construction of retaining walls between the Station and the off-ramp, minor realignments of bus circulation and station layout to accommodate the new off-ramp location and minor reconstruction on the Truman Overpass to reconfigure the intersection with the off- and on-ramps.

Cause of Change and Proposed "Revised" Scope

As design progressed, some changes had to be made to the design to address concerns with the operation of the new off-ramp in order to permit safe operation of the bus-only slip-ramp where it departs from the mixed traffic portion of the ramp. As a result, the ramp now touches down at a different location in the bus station area necessitating a reorientation of the bus circulation patterns and a minor redesign of the bus bays. See attached plan titled "Bus Ramp — Option 3 (Station Option 2)".

Resulting Impacts

The proposed construction of the downtown New Britain Station would have the following impacts:

- Land Acquisition No additional land required since the Station will be constructed on the same footprint as in the FEIS and the 2006 reevaluation.
- Historic/4(f) The proposed design change would have no effect on historic resources or 4(f) regulated properties.
- Redesign of the existing off-ramp, from Route 72 E/B to the Route 71 Truman Overpass

<u>Resulting Benefits</u>

The proposed construction of the downtown New Britain Station would have the following benefits:

- Moving the split for the busway slip ramp further up the exit ramp improves safety by giving drivers more time to react to the unconventional ramp configuration of a bus-only lane and a mixed traffic lane.
- The redesigned slip ramp allows the busway to maintain direct access from Route 72 to the busway station without entering mixed traffic on the Route 71 overpass.

<u>Summary</u>

There are no environmental factors or features in the downtown New Britain Station area of the project that have changed. The Station configuration is similar to the recommended option in the April 2006 reevaluation. The information presented in the FEIS has not substantially changed and remains valid.

2. Route 71 (Truman Overpass) Bridge over Busway and Railroad

April 2006 Reevaluation Scope

The April 2006 reevaluation submission proposed new construction on the Truman Overpass to create a passenger pick-up/drop-off area.

Cause of Change and Proposed "Revised" Scope

As a cost mitigation measure, the new construction on the Truman Overpass will be minimized. The roadway currently widens to add a third southbound lane on the overpass directly above the busway. This third southbound lane will be reserved as a drop-off lane for a specified distance. A sidewalk connection would be made from the southbound side of the overpass to the station below. The sidewalk connection will be ADA accessible. See attached plan titled "Bus Ramp – Option 3 (Station Option 2)".

Resulting Impacts

The reservation of the third southbound lane on the Route 71 Truman Overpass for a drop-off lane will have a negligible impact on roadway capacity.

Resulting Benefits

The resulting benefits of the modified overpass design would be a reduction in project construction costs of about \$2,000,000.

Summary

There are no environmental factors or features along the Truman Overpass that have changed. Although the kiss and ride area will not be built, a drop-off lane will be provided and a direct sidewalk connection will be made from the southbound side of the Truman Overpass to the station. Therefore, the information presented in the FEIS and 2006 reevaluation have not changed substantially and remain valid.

3. Multi-Use Trail Location Relative to the Busway in New Britain

A design change has been made to switch the relative locations of the busway and the multi-use trail on the portion of the busway in New Britain. In the FEIS the multi-use trail was on the north side of the busway. In order to minimize conflicts between vehicles and multi-use trail users, the trail is moved to the south side of the busway so the trail never needs to cross an active bus driveway or lane. This change has no impact on right-of-way acquisition or cost. It only improves the safety of the facility overall. Therefore, the information in the FEIS remains valid.

4. East Main Street Station Relocation to the vicinity of the Busway and East Main Street Intersection

FEIS Recommended Scope

The East Main Street Station would serve a neighborhood on the east side of the City of New Britain. The area is a mix of older residences and industrial properties. The station was designed to have an access driveway from East Main Street for local bus access and kiss-and-ride drop-offs. Pedestrian access was provided from both East Main Street and from the Yale Street area on the east side of the busway. Signage and the other features on East Main Street would alert the public to the location of the station.

Cause of Change and Proposed "Revised" Scope

Subsequent to the FEIS, the vacant industrial property adjacent to this site was purchased and an automobile dealer constructed a major new facility, including significant parking and vehicle storage adjacent to the site of the busway station.

During preliminary design, vehicle access to the busway station was added to create a through-driveway between Stanley Street to the southwest and East Main Street to the northwest. This additional road access created an issue with access to the car dealership by delivery vehicles and acquisition of right-of-way.

As a result of these concerns and the ongoing cost mitigation effort, changes to this station location were considered.

The former East Main Street Station will be moved to the east. It would have far side onbusway platforms near the busway's intersection with East Main Street. In addition, cutouts for local bus stops and kiss-and-ride drop-offs can be provided on East Main Street near the busway crossing for convenient transfer access. See attached plan showing the Station near the Busway and East Main Street intersection.

Resulting Impacts

The proposed East Main Street Station relocation to the vicinity of the Busway and East Main Street intersection would have the following impacts:

- There may be minor additional impact on local traffic if the cutouts are provided. The busway's crossing at East Main Street is already proposed to be signalized to allow safe passage of busway traffic.
- The Busway cross section would consist of 2-12 foot lanes and 2-4 foot shoulders. Therefore, no drop-off lanes or by-pass lane would be provided.
- This Station would primarily serve local demand, as it would have cutouts for local buses and kiss-and-ride drop-offs but no parking.

- Land Acquisition the proposed Station can be accommodated within the existing right-of-way therefore, no additional land is required.
- Historic/4(f) The proposed design change would have no effect on historic resources or 4(f) regulated properties.

Resulting Benefits

The proposed relocation of the East Main Street Station to the vicinity of the Busway and East Main intersection would have the following benefits:

- The Main Street station, at its new location, would have more convenient pedestrian access and more convenient and quicker bus-to-bus transfers than the previous East Main Street station location. An analysis showed the relocation brings the station within a comfortable walking distance (0.35 miles) of a larger residential population of potential riders, and a small increase in overall user benefits of about ten hours.
- The new station location will be more visible than the original location. This visibility will make it easier to identify the station as a point of access for busway services. Its location will be less isolated for both public access and public safety.
- There is a substantial reduction in project cost when compared to the Preliminary Engineering Study and the estimates from the latest New Starts submittal. The probable savings in project construction cost is approximately \$2,500,000 (2008 dollars).

<u>Summary</u>

The relocation of the East Main Street station to the vicinity of the Busway and East Main Street intersection would substantially reduce the impact to the properties near the original station location. There are no significant environmental factors or features in the area of the project where the new East Main Street Station will be constructed. Meetings were held with local elected officials and professional staff in New Britain who supported the relocation plans. As described above, the relocation of the East Main Street Station is substantially different than what was presented in the FEIS, but results in less impact. The plans for the relocated station will be presented to the public during Final Design for review and comment.

5. Eliminate Precast Concrete Barrier Curb with Protective Fence

<u>FEIS</u>

The description in the FEIS was that the Busway and Multi-use Trail be separated by a precast concrete barrier curb with protective fence on top of it.

Cause of Change and Proposed "Revised" Scope

As a cost mitigation measure, a design change has been made to replace the precast concrete barrier curb with protective fence between the Busway and the Multi-use Trail described in the FEIS with a 6" curbing and 6-foot vinyl chain link fence. This change was thoroughly reviewed and agreed that there was no standard requiring that the two facilities had to be protected by a concrete barrier.

Resulting Impacts

The proposed change still serves the main function of preventing people using the Multiuse Trail from getting on the Busway.

Resulting Benefits

The resulting benefits of the proposed design change would be a reduction in project construction costs of about \$2,500,000.

<u>Summary</u>

There are no environmental factors or features associated with this proposed design change. Therefore, the information presented in the FEIS and the Preliminary Design has not changed substantially and remains valid.

6. Flatbush Avenue Overpass

Flatbush Avenue Proposal

The Flatbush Avenue Bridge project has independent utility as a highway-rail grade separation project, and would be constructed even in the absence of the proposed Busway

In a letter to FTA dated December 6, 2007, ConnDOT requested approval of a proposal to separate the Flatbush Avenue Bridge project from the proposed New Britain - Hartford Busway New Starts project and complete it using Federal Highway Administration (FHWA) funds.

On January 7, 2008, FTA issued a letter concurring with ConnDOT's proposal with the conditions that:

- Separating the projects will not impact the schedule for completing the Busway,
- The Flatbush Avenue Bridge project is fully funded and ready to proceed, and
- There will be no resulting conflicts between the two construction projects.

It is anticipated that removing the Flatbush Avenue Bridge from the Busway project will reduce the total cost of the Busway project by approximately \$55 million (in year of expenditure dollars).

7. Reduce Scope at New Park Avenue (Kane Street) Station

FEIS Recommended Scope

The New Park Station (Kane Street Station) is located in the Parkville neighborhood of Hartford, near I-84's overpass of New Park Avenue. A Stop and Shop supermarket abuts the proposed station location. A movie theater was opened immediately south of I-84 on New Park Avenue. There are industrial and residential areas nearby. The station area is adjacent to Kane Brook.

The station layout requires that one of the busway lanes be constructed to the west of the I-84 piers. In order to develop the lane and associated sidewalk west of the piers, the Kane Brook culvert would need to be extended and retaining walls constructed. Sidewalk connections, between the station and existing sidewalks along New Park Avenue are proposed. In addition, a walkway would be provided to allow busway users to access the parking area (now sited under I-84) and the movie theater, roughly 400 meters (about 1,300 feet) from the station. It is assumed that over 100 parking spaces could be provided for busway passengers in the space below I-84. Vehicle (car, delivery truck, and bus) access to the site has been considered in the design, including delivery truck access to the Stop & Shop. Local bus drop-offs would occur at a bus cut-out just off of the Stop & Shop driveway. A station building, which is visible from both Kane Street and New Park Avenue, is now proposed at this location.

Another major component of this station is the redevelopment of enhanced wetland/parkland between Kane Brook, New Park Avenue, the Stop & Shop parking lot and the busway station.

Cause of Change and Proposed "Revised" Scope

A poor connection to the neighborhood, impacts to Kane Brook and the constructability of high retaining walls are concerns with the FEIS-based design. A relatively low ridership forecast, design guidelines and cost effectiveness were considered when developing different alternatives for the layout of the station platforms and the busway lanes through this area.

The busway cross section in the area of the Kane Brook Station has been changed to a three-lane configuration, with the center lane being a bypass lane for use when buses are stopped at the station platforms. Station platforms are aligned similar to the FEIS-based alternative. This realignment allows both the inbound and outbound busway lanes south of the station to be aligned east of the existing I-84 piers, thus eliminating the need to extend the existing Kane Brook culvert and construct a large retaining wall. A drop-off area for local buses will be provided along the northbound side of New Park Avenue and a second drop-off area for shuttle

buses will be provided adjoining the Stop & Shop parking lot, closer to the southbound station platform. A protective canopy will be provided for bus patrons at this drop off area, adjoining the Stop & Shop property. See attached plan titled "Mitigation - Modifications to Kane Street

Resulting Impacts

- Construction of the Kane Brook Station would eliminate the former direct walkway connection that had been provided between the station and the parking area beneath I-84 and the movie theatre located about 1,300 feet away to the south, as envisioned in the FEIS-based design. Bus ridership is not likely to be negatively impacted.
- The proposed busway alignment is closer to Amtrak. Therefore, an approval of a design exception will be required in order to place the busway barrier at 10-feet horizontally clear from the centerline of the closest track.
- There will be no station building at this site.
- There will be no dedicated busway patron parking constructed.

Resulting Benefits

- The previously anticipated impact associated with a culvert extension along Kane Brook will be avoided.
- The extent of required retaining walls along the western portion of the busway lanes is greatly reduced.
- Shuttle bus patrons transferring to or from busway buses will be dropped inside Stop & Shop plaza rather than stopping along New Park Avenue.
- The new sidewalk connections to New Park Avenue and Stop and Shop will be as direct and in a much more open setting than the previous plan, thus enhancing usage and safety.
- Anticipated project costs are reduced by approximately \$3,400,000 (2008 dollars).

Summary

There are no environmental factors or features in the Kane Brook Station area of the project that have changed significantly. The information presented in the FEIS has not substantially changed and remains valid.

8. Laurel Street Bridge

April 2006 Reevaluation Scope

The existing Laurel Street Bridge carries Laurel Street over Amtrak and is located between the Sisson Avenue interchange and Sigourney Street in Hartford. Laurel Street runs north-south between Park Street and Niles Street. The Laurel Street Bridge was not listed in the FEIS as one of the structures that would require alterations/reconstruction to meet the requirements of the Busway. At the time ConnDOT developed the April, 2006 Reevaluation of the FEIS, it was believed that a new bridge would be required to accommodate the Busway and meet Amtrak's requirements.

Cause of Change and Proposed "Revised" Scope

It has been determined through additional engineering study and coordination with Amtrak that the existing structure will not have to be replaced in order to accommodate the proposed busway and Amtrak's facilities below.

The proposed busway will be aligned between the existing Laurel Street Bridge pier and north abutment, as was intended in the FEIS-based design. The busway template will contain two 12-foot wide lanes, and two two-foot wide shoulders, with single-faced concrete barrier for protection along the pier and abutment faces. Amtrak's active track will be realigned and an access road constructed between the existing pier and the south abutment. Space will also be provided for a future track. Horizontal clearance between the centerline of relocated track and the face of the pier will be between the 10-foot absolute minimum and the 16-foot desired range that is required by Amtrak. This matter has been coordinated with Amtrak and a design exception will need to be granted. The vertical clearance between the relocated track and the underside of the bridge will not change from the existing condition.

Resulting Impacts

Retaining the existing Laurel Street Bridge would avoid the impacts from reconstructing the bridge, including effects on the traveling public and businesses along Laurel Street.

<u>Resulting Benefits</u>

Avoiding replacement of the Laurel Street Bridge will reduce project construction costs by approximately \$5,200,000 (2008 dollars).

<u>Summary</u>

There are no environmental factors or features in the Laurel Street Bridge area of the project that have changed. The Busway alignment is virtually identical to the recommended alignment in the FEIS. The information presented in the FEIS has not substantially changed and remains valid.

9. Sigourney Street Station

FEIS Scope

This area is on the periphery of downtown Hartford in the Asylum Hill neighborhood. The station is within walking distance of the Aetna corporate headquarters, a state office building at 25 Sigourney Street and the Hastings International Conference Center as well as Hartford High School. I-84 passes over Sigourney Street on a viaduct and Sigourney Street is also on a structure below I-84 and above the Amtrak tracks. Large parking lots for Aetna are found at the surface below I-84, and a parking garage for Aetna employees is also found near this location.

FEIS Rationale for Selection of Station Concept

The Draft EIS contained a station option (Option J1) which located the station on the parking lot one block west of Sigourney Street. At that time, the station design had no on-off access for buses, and the station was behind the surface parking lot and at a lower grade, so the site was not very visible. As a result, this site was considered undesirable. The local citizens were concerned the site was isolated from the neighborhood. Further, this locaton would not have served Aetna employees (one primary group of users) very well. It would have relocated existing parking, and it conflicted with Aetna's ultimate plans (at that time) to build a parking structure on that site.

The recommended Action in the FEIS (Station J2-A) located the station adjacent to the Aetna corporate parking structure. While still below grade, with amenities and access improvements it would have served area residents and the Aetna complex more effectively than the original design of Option J-1. In regards to a long-term station improvement (Station J2-B), Aetna was still investigating the possibility of expediting their plans to rebuild this parking structure to accommodate busway implementation. Included in those plans at the time was consideration of Aetna constructing a second parking structure on the previously considered site west of Sigourney Street (Option J1).

Cause of Change and Proposed "Revised" Scope

Following completion of the FEIS and the Record of Decision, ConnDOT has continued to meet with Aetna officials to coordinate the plans for the busway with Aetna's short-term plans for replacing their existing parking structure and their ultimate plans for parking facilities at their Hartford campus. Several refined station alternatives were developed and discussed with Aetna during this period. Safety in and around the station, visibility, vehicular, pedestrian and bus operations were considered as these additional alternatives were evaluated.

Aetna decided to move ahead with replacement of their parking structure and also make other roadway and traffic circulation improvements around their corporate parking garage in advance of the busway construction, preferring that the busway station not be incorporated into their plans for replacement of the parking structure. Instead, their preference is that the station be located on the site of their existing surface parking, west of Sigourney Street and their parking

garage access road. As ConnDOT progressed design for the Sigourney Street station on the site of former DEIS option J1, it was determined that access on and off the busway could be added at this location as well as creation of an area of local and shuttle buses pick-ups and drop-offs. The platforms were moved closer to Aetna, thus improving visibility and bus access when compared to Option J1 from the DEIS.

A station design workshop with the public was held in February, 2007 at which time the latest proposed station alternative was presented and discussed. The public was generally supportive of this alternative. ConnDOT worked closely with Aetna to develop the proposed design in order to assure the needs of all parties were being met. The proposed design will also encompass roadway improvements at the intersection of Hawthorn Street and Sigourney Street to improve alignments of the interesting roads, and improve pedestrian access.

Having considered safety and visibility at the station, vehicular, pedestrian and bus movements, and the intended schedules for parking and roadway improvements by Aetna and ConnDOT's busway construction, the latest alternate which places the busway station west of Sigourney Street is recommended.

The proposed busway station will be located about 100 feet west of Sigourney Street and along the northern side of the busway. The busway cross section in the area of the Sigourney Street Station is a three-lane configuration, with the center lane being a bypass lane for use when a bus is stopped at the station platforms. Inbound and outbound station platforms are aligned directly opposite of each other. Full bus access between the busway and the local road network will be provided via entrance and exit roads that are connected to Hawthorn Street at the station.

The station site proposal included a coordinated plan to improve traffic movements through the intersection of Sigourney and Hawthorn Streets, while accommodating the drop off and pick-up of busway passengers for the busway and a direct access to Aetna's parking garage. Local buses and shuttle buses will be permitted to enter and circulate through the station area via Hawthorn Street in order to drop-off and pick-up passengers. Pedestrian access to the station is provided by sidewalks along Hawthorn Street and a direct connection from Sigourney Street. With the station being located just west of Sigourney Street, there will be a direct visual connection with the properties to the north and west. Trailblazing signs will be included to direct pedestrian traffic to the station from Sigourney Street south of the station.

The intersection of Hawthorn Street and Sigourney Streets is currently signalized and will remain signalized under the proposed condition. ConnDOT has completed a traffic analysis of this intersection that considered buses traveling on and off the busway via the Sigourney Street Station. The results of this analysis show the level of service remains good. The City of Hartford has reviewed this analysis and they concur with the results.

Additional station features described in the FEIS, including bicycle facilities, landscaping, site lighting, crosswalk treatments and other anticipated amenities would be incorporated into the final design of the station. See attached plan titled "Hawthorn/Sigourney Intersection Option 6".

Resulting Impacts

Construction of the Sigourney Street Station would have the following impacts:

- Noise- assumed no further impacts
- Land use at the site will be changed from parking to a transit station. There will be a loss of parking for Aetna.
- Land Acquisition Additional land will be required for the station site to be located west
 of Sigourney Street and for the street improvements near the station at the northwest
 corner of Sigourney Street and Hawthorn Street. These two properties are currently used
 for surface parking.
- The traveling public will be affected by roadway construction along Sigourney and Hawthorn Streets.
- There is no net change to the project cost estimate associated with the revisions to Sigourney Street station. Prior estimates and allowances are approximately equal to the revised cost for the station and environs.

Resulting Benefits

Locating the busway station west of Sigourney Street and reducing the busway template to three lanes at the station, will produce the following benefits:

- Buses will now have full access on and off the busway at this station.
- There will be a shuttle drop-off area to simplify transfers.
- The station will now be visible and easily accessible from both Hawthorn and Sigourney Streets.
- There is no longer a need to coordinate busway station designs with the details of Aetna's parking garage.
- There are less construction impacts and more clearance between the busway and Aetna's parking garage to the north.

<u>Summary</u>

There are no environmental factors or features in the Sigourney Street Station area that have significantly changed. Although the location and configuration are different from the recommended option in the FEIS, the station will still be built in the same proximity. The information presented in the FEIS has not changed substantially and remains valid. Meetings with elected officials, professional staff in Hartford and the public will continue to be held as the final station design is developed.

10. Busway Design from Sigourney Street Station to Northern Terminus

FEIS Recommended Scope

The busway would be a two-lane, two-directional roadway. A typical cross-section of the busway would include two 12-foot lanes and two four-foot shoulders. Additionally, where the busway is adjacent to Amtrak, the busway would be positioned to provide a 16-foot horizontal clearance from the centerline of the closest track. Where the available space is very restricted, Amtrak has granted design exceptions, on a case-case basis, to permit the horizontal clearance to be closer to ten feet.

Cause of Change and Proposed "Revised" Scope

From just south of the Sigourney Street Station to the northern terminus of the project, it was determined during preliminary design that the Busway alignment and typical two-lane cross section would require construction of a two-lane roadway, four bridges, 11 retaining walls, drop-off lanes for the Sigourney Street Station, relocation of the piers supporting the viaduct carrying Interstate 84 though this section, reconstruction of the I-84 westbound entrance ramps from both Asylum Street and Capitol Avenue, and reconstruction of the I-84 eastbound exit ramp to Asylum Street. There was also potential impact to Aetna' Physical Facilities plant located north of the right-of-way. In an effort to reduce anticipated project costs, ConnDOT completed other preliminary design studies of this segment of the busway.

The condition of the viaduct structure carrying I-84 over the busway and Amtrak is also a serious concern. Both the substructure and superstructure of this major structure require substantial repairs in the near future. In addition, there is a long term study underway for the complete replacement of this structure. The relocation of the I-84 pier columns contemplated to make room for the second busway lane under this structure were considered high risk work which, given the deteriorated condition of the existing viaduct, could lead to substantial cost overruns and/or delays during busway construction. Furthermore, should the planning study now underway yield the expected outcome that the I-84 viaduct needs to be replaced, the entire structure may be rebuilt as part of a separate highway project. If the I-84 structure is rebuilt, any work to relocate the piers as part of the busway project will be rendered virtually worthless

Having evaluated the results of two additional preliminary design studies completed in January, 2008 and April, 2008, ConnDOT is recommending a revised preliminary design from the Sigourney Street Station to the Northern Terminus of the project that will reflect the following characteristics:

 Proceeding inbound toward downtown Hartford, from immediately south of the Sigourney Street Station to immediately north of this station, the busway will transition from two lanes to three lanes through the station including a center bypass lane, and then to a one-lane facility north of the station.

- From north of Sigourney Street Station to Flower Street, for a distance of about 1,200 feet, the busway will remain a one-lane facility.
- From the Sigourney Street Station to Flower Street, busway operations will be reversible and will be controlled by traffic signals.
- From Flower Street to the northern terminus, the busway will be designed as a two-lane facility. The proposed busway alignment with a two-lane cross-section and reduced shoulder widths has been redesigned to fit under the existing I-84 eastbound off-ramp to Capitol Avenue without impacts to the bridge overhead.
- At the northern terminus, the busway northbound roadway has been redesigned to merge with the eastbound I-84 eastbound exit ramp as it terminates at Asylum Street allowing a simplified intersection design.
- The signals for the reversible lane and at the northern terminus will be optimized to minimize delays to busway traffic.

In January, 2008, ConnDOT completed a traffic analysis of the effects from the latest proposed busway configuration on the roadway network, including intersections along Sigourney Street, Flower Street, Capitol Avenue, Broad Street and the I-84 EB off-ramp/ busway intersection at Asylum Street. This analysis considered buses traveling on and off the busway via the Sigourney Street Station and the single-lane busway operations from Sigourney Street to Flower Street. The results of this analysis show the level of service at the intersections in question remains good. See attached plans titled "Preliminary Design Submission; Contract No. 63-H137; Drawing No. HWY-01, HWY-02, and HWY-03".

Resulting Impacts

The proposed design from Sigourney Street Station to the Northern Terminus, would have the following impacts.

There will be a minor impact on bus operations. An analysis by CRCOG shows that the average delay will be 28 seconds for buses that need to operate in this segment due to competition with bus traffic in the opposite direction. This impact can be minimized by fully actuated traffic signals and radio transponders on the bus controlling traffic flow through the reversible lane segment. In addition, the signals can be programmed to favor traffic in the direction of peak flow, and vehicle-location technology on the buses will enable favoring buses that are running behind schedule over buses running on schedule or running deadhead trips. The minor delays on a limited number of the busway buses that may result from the reversible lane operation will have a minimal impact on ridership since so many buses can now access the busway at the Sigourney Street station and get into the circulation patterns for the downtown without coming all the way to Asylum Street. The first review of impact on ridership which was done by CRCOG assuming the average delay cited above and without assuming any offsetting benefits of signal preference or AVL showed a reduction in user benefits of between one-half and one and one-half percent depending upon two different average speed assumptions. As the Service Plan is updated this year, buses can be routed and scheduled to maximize ridership while minimizing delays in this segment which should reduce the impact on

user even further. New bus routings can also be developed that maximize the benefits of full bus access at the Sigourney Street station and minimize the potential conflicts in the

- Land Acquisition No additional land will be required.
- Historic/4(f) The proposed design change would have no effect on historic resources or
- Busway traffic will share a common roadway with non-busway traffic as the busway northbound roadway will now merge onto the I-84 off-ramp at Asylum Street at the Northern Terminus of the Busway.
- There will be a slight reconfiguration of the intersection at Asylum Street to accommodate the new combined off-ramp.

Resulting Benefits

In addition to the resulting benefits from the Union Station/North Terminus design that were indicated in ConnDOT's April, 2006 reevaluation, the proposed design from Sigourney Street Station to the Northern Terminus would have the following benefits.

- The busway alignment will avoid impacts to Aetna facilities along the right-of-way immediately north of Sigourney Street.
- There will be no need to relocate the existing I-84 viaduct piers and thus no construction impacts to traffic operations on that structure. The ADT for this section of I-84 is
- The cost and schedule risk to the busway associated with reconstructing piers on a deteriorated structure will be avoided.
- There will be no impact to the existing structure carrying the I-84 off-ramp to Capitol
- There is a substantial reduction in anticipated project costs. The probable savings to the construction costs is approximately \$9,400,000 (2008 dollars)

Summary

There are no environmental factors or features in this area of the busway project that have changed. Although the busway configuration is somewhat different from the approved configuration in the FEIS and the April 2006 Reevaluation, the busway will still be built in essentially the same location with no additional impacts. The environmental consequences of the recommended actions presented in the FEIS and the April 2006 Reevaluation have not changed substantially and remain valid. Meetings with elected officials, professional staff in Hartford and the public will continue to be held as the final design is developed. Any impacts on bus operations and the related minor delays in travel times will be at least partially offset by the improved "directness of service" available to many riders since buses now have an option to get on and off the busway at the Sigourney Street station.

The deteriorated condition of the I-84 viaduct structure increases the risk associated with any work to the structure. By eliminating the second lane of the busway under the viaduct, the pier relocation work is eliminated and a significant risk to the busway schedule and budget is avoided. It also should be noted that the reversible lane concept will not prevent a second lane from being added to this section of the busway in the future should circumstances warrant such a change.

Finally, reconstruction of the I-84 viaduct structure is being considered as a separate highway project. An advocacy group has been formed and a planning study is underway. Any reconstruction of the I-84 viaduct would provide for a 2 lane busway in the future.

11. I-84 E.B. Off-ramp to Capitol Avenue

In the April 18, 2006 Reevaluation of the FEIS, ConnDOT identified and evaluated a requirement to reconstruct the I-84 EB Off-ramp to Capitol Avenue, due to a conflict with the proposed busway cross section and Amtrak facilities to be relocated beneath that structure. Based on the currently proposed design of the busway from Sigourney Street Station to the Northern Terminus, as addressed in the previous item, this reconstruction work will now not be required.

Therefore, Item 3, I-84 EB Off-ramp to Capitol Avenue, should be removed from ConnDOT's Reevaluation of the FEIS dated April 18, 2006.

Conclusion

As a result of the above-mentioned changes, it is ConnDOT's position that the FEIS, the ROD, and the approvals in the April 2006 Reevaluation are still valid, and supplemental environmental documentation or studies are not required. Station Design meetings were held in each of the four affected communities during the winter of 2007 to inform the public of the general progress in project design. The pending project cost estimate due next month will reflect the design changes identified in this document.

Your concurrence in this matter is greatly appreciated. If you have any questions concerning this reevaluation, please contact Mr. Stephen V. Delpapa, Transportation Supervising Planner, at (860) 594-2941.

Very truly yours,

Edgar T. Hurle

Transportation Planning Director Bureau of Policy and Planning

Enclosures

Comr. Marie - Dep. Comr. Boice-Dep. Comr. Martin

Charles S. Barone - Edgar T. Hurle

Mark D. Rolfe - Dennis A. Guyette

Michael A. Sanders - Ricardo Almeida

Copy Ricardo Mesc. Manreer (lutter only)

n Cunningham (original drawings to
ised 6-0 00 Thomas A. Harley - Richard Armstrong - Brian Cunningham

Cynthia S. Holden - Stephen V. Delpapa

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